

FINAL ENVIRONMENTAL ASSESSMENT AND LAND PROTECTION PLAN
FOR THE PROPOSED ESTABLISHMENT OF
RED RIVER NATIONAL WILDLIFE REFUGE

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AND NATCHITOCHES PARISHES, LOUISIANA

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Fish and Wildlife Service
Southeast Region
Atlanta, Georgia

August 2002

TABLE OF CONTENTS

| | | |
|------|--|----|
| I. | PURPOSE AND NEED FOR ACTION..... | 1 |
| A. | Introduction | 1 |
| B. | Background | 3 |
| C. | Proposed Action..... | 3 |
| D. | Coordination and Consultation..... | 4 |
| E. | U.S. Fish and Wildlife Service Land Acquisition Policy | 5 |
| F. | Public Participation..... | 5 |
| II. | ALTERNATIVES INCLUDING THE PROPOSED ACTION | 7 |
| A. | Alternative 1: No Action..... | 8 |
| B. | Alternative 2: Protection and Management of up to 50,000 Acres from Five Units (Preferred Alternative)..... | 8 |
| | Alternative 3: Protection and Management of up to 50,000 Acres at an Expanded Bayou Pierre Unit..... | 15 |
| III. | AFFECTED ENVIRONMENT | 15 |
| A. | General | 15 |
| B. | Land Use and Vegetation..... | 17 |
| C. | Wildlife Resources | 17 |
| D. | Fishery Resources | 18 |
| E. | Socioeconomic and Sociocultural Conditions | 18 |
| F. | Cultural Resources..... | 19 |
| IV. | ENVIRONMENTAL CONSEQUENCES..... | 19 |
| A. | Alternative 2: Protection and Management of up to 50,000 Acres from Five Units (Preferred Alternative)..... | 19 |

| | | |
|-----|--|----|
| B. | Alternative 3: Protection and Management of up to 50,000 Acres at an Expanded Bayou Pierre Unit | 24 |
| V. | INFORMATION ON PREPARERS | 25 |
| VI. | SUMMARY OF PROPOSED ACTION | 25 |

Appendices

| | | |
|-------------|--|----|
| Appendix A. | The Red River National Wildlife Refuge Act | 31 |
| Appendix B. | Conceptual Management Plan | 35 |
| Appendix C. | Interim Compatibility Determination | 40 |
| Appendix D. | Interim Recreation Act Funding Analysis | 46 |

List of Figures

| | | |
|-----------|--|----|
| Figure 1. | Selection area for the Red River National Wildlife Refuge and related resources | 2 |
| Figure 2. | Proposed refuge units for the establishment of Red River National Wildlife Refuge | 10 |
| Figure 3. | Proposed lands of Lower Cane River Unit, Red River National Wildlife Refuge under Alternative 2 | 11 |
| Figure 4. | Proposed lands of Bayou Pierre Floodplain and Spanish Lake Lowlands Units, Red River National Wildlife Refuge under Alternative 2 | 12 |
| Figure 5. | Proposed lands of the Headquarters Unit, Red River National Wildlife Refuge under Alternative 2 | 13 |
| Figure 6. | Proposed lands of Wardview Unit, Red River National Wildlife Refuge under Alternative 2 | 14 |
| Figure 7. | Proposed lands for the establishment of Red River National Wildlife Refuge under Alternative 3 | 16 |
| Figure 8. | Land acquisition priorities for Lower Cane River Unit, Red River National Wildlife Refuge | 27 |
| Figure 9. | Land acquisition priorities for Bayou Pierre Floodplain and Spanish Lake Lowlands Units, Red River National Wildlife Refuge | 28 |

| | |
|---|----|
| Figure 10. Land acquisition priorities for Headquarters Unit, Red River National Wildlife Refuge | 29 |
| Figure 11. Land acquisition priorities for Wardview Unit, Red River National Wildlife Refuge | 30 |

List of Tables

| | |
|--|----|
| Table 1. Protection priorities for the proposed Red River National Wildlife Refuge and recommended methods of acquisition | 26 |
|--|----|

A. Introduction

On October 13, 2000, House Resolution 4318, the Red River National Wildlife Refuge Act, was signed into law (Public Law 106-300, Appendix A). This legislation authorizes the establishment of the Red River National Wildlife Refuge to provide for the restoration and conservation of fish and wildlife habitats in the Red River Valley ecosystem in northwest Louisiana. According to the legislation, the refuge shall consist of up to 50,000 acres of federal lands, waters, and interests therein within the boundaries depicted upon the map entitled, "Red River National Wildlife Refuge - Selection Area," dated September 5, 2000 (Figure 1). When sufficient property is acquired by the U.S. Fish and Wildlife Service (Service) within these boundaries to constitute an area that can be efficiently managed as a national wildlife refuge, then the establishment of Red River National Wildlife Refuge will take effect. To guide land protection efforts, the Service has identified five units, including one for a proposed headquarters and visitor center site, within the approved selection area.

The mission of the National Wildlife Refuge System is "... to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans" (National Wildlife Refuge System Improvement Act of 1997). National wildlife refuges provide important habitat for native plants and many species of mammals, birds, fish, insects, amphibians, and reptiles. They also play a vital role in preserving endangered and threatened species. Refuges offer a wide variety of wildlife-dependent recreational opportunities and many have visitor centers, wildlife trails, and environmental education programs. Nationwide, about 30 million visitors annually hunt, fish, observe and photograph wildlife, or participate in educational and interpretive activities on refuges.

The scope of this environmental assessment is limited to the proposed acquisition of lands for the establishment of Red River National Wildlife Refuge. The environmental assessment is not intended to cover the development and/or implementation of detailed, specific programs for the administration and management of those lands. The enclosed conceptual management plan (Appendix B) and interim compatibility determination (Appendix C) give general outlines on how the new refuge would be managed. These appendices are provided as general information for the public in the public's review of the environmental assessment. Once the refuge is established and the needed lands or interests in lands are acquired, the Service will develop a detailed Comprehensive Conservation Plan to incorporate the new lands and resources under its control, as referenced in Section 4(b) of Public Law 106-300. At that time, the Comprehensive Conservation Plan will be made available for public review in accordance with the requirements of the National Environmental Policy Act.

Figure 1. Selection area for the Red River National Wildlife Refuge and related resources.

B. Background

Historically, the Red River Valley was forested with bottomland hardwoods, cypress sloughs, and shrub swamps. After the Louisiana Purchase in 1803, early settlers began to clear these areas for farms and homesteads. This forest-clearing rapidly accelerated in the 1960s and 1970s with the rise in soybean prices. During the last three decades, the Red River Valley was used extensively for agricultural production. The river itself was usually very turbid, and its wildlife and fishery habitats were considered poor compared to those in other parts of the state.

In 1964, Congress authorized construction of the Red River Waterway Project. This project, completed in 1994, consists of five lock and dam complexes located between the Old River Lock on the Mississippi River to the I-220 bridge in Shreveport-Bossier City. Since the completion of the Waterway Project, habitats for certain species of wildlife (i.e., migratory waterfowl) and fish (i.e., largemouth bass) have improved. The river's water levels are now higher and more constant, and its turbidity levels have been greatly reduced. The water quality has also improved, and the seasonal retention of water levels has resulted in a rich diversity of aquatic plants.

The increased water levels on the river have also improved some adjacent habitats. Flooded timber and farm fields with wet, depressional areas are now common. United States Department of Agriculture (USDA) programs such as the Wetlands Reserve Program (WRP) and Conservation Reserve Program (CRP) are restoring valuable wildlife habitats through the reforestation of previously converted wetlands and highly erodible lands in the Red River Valley. Changes in agricultural practices have also resulted in an increase in rice production and additional migratory bird habitat.

The proposed Red River National Wildlife Refuge is located along that section of the Red River between Colfax, Louisiana, and the Arkansas state line, a distance of approximately 120 miles.

C. Proposed Action

The Service proposes to protect, restore, and manage certain lands in the Red River Basin by acquisition through fee title purchases from willing sellers and through leases, conservation easements, and/or cooperative agreements from willing landowners. All lands and waters acquired would be managed by the Service as a national wildlife refuge. The goals of the proposed refuge would be to (1) provide for the restoration and conservation of native plant and animal communities on suitable sites in the Red River Valley, including restoration of extirpated species; (2) provide habitat for migratory birds; and (3) provide technical assistance to private landowners in the restoration of their lands for the benefit of fish and wildlife.

Funding for this project would be provided through the Migratory Bird Conservation Fund and the Land and Water Conservation Fund. The Migratory Bird Conservation Fund includes monies collected from the sale of Federal Duck Stamps, entrance fees from certain national wildlife refuges, and import duties on arms and ammunition. The authority for the use of these funds for land acquisition is the Migratory Bird Conservation Act. The Land and Water Conservation Fund includes monies collected from the sale of offshore oil leases. The authority for the use of these funds is the Red River National Wildlife Refuge Act, which was signed into law on October 13, 2000 (Public Law 106-300).

In acquiring these lands, the Service will coordinate with the State of Louisiana to seek concurrent law enforcement jurisdiction over the area.

D. Coordination and Consultation

There is growing support for a national wildlife refuge along the Red River in northwest Louisiana. A group of supporters has formed the "Friends of the Red River Refuge" to promote this concept. Another group, the Red River Wetlands Coalition, is also a strong proponent of the refuge. Members of these groups have been to the Service's offices in Atlanta and Washington to voice their support for the establishment of the proposed refuge. They have also made several trips to Washington, D.C., to lobby for legislation to establish and fund the refuge.

Public attitudes are expected to be favorable if public uses such as hunting, fishing, birdwatching, and environmental education are made available on the new refuge. The Service has coordinated the development of this proposal with the Louisiana Department of Wildlife and Fisheries, which supports the establishment of the refuge. Initial public reaction to the proposed refuge has been favorable. Other refuges and wildlife management areas in Louisiana are popular with sportsmen, and most conservation groups support the Service's land acquisition program.

Feature articles on the refuge proposal have been published in the Shreveport Times, along with editorials that have endorsed the refuge concept.

The Service has also coordinated the development of this proposal with a variety of navigation and development interests along the Red River. Input regarding the selection of the refuge units was received from the Red River Waterway Commission, Louisiana Department of Transportation and Development, Port of Shreveport-Bossier, Natchitoches Port, Red River Valley Association, and the North Louisiana Council of Governments.

The Service is also coordinating its planning efforts with the U.S. Army Corps of Engineers' Vicksburg District Office concerning the acquisition of mitigation lands for the Red River Waterway Project. Opportunities may exist for some of these mitigation lands to be managed as part of the Red River National Wildlife Refuge.

Environmental education and interpretation possibilities have been discussed with

the Sci-Port Development Center and Louisiana State University-Shreveport. The Service is a member of the steering committee for the establishment of the Red River Education and Research Park (formerly the C. Bickham Dickson Park), which is located directly across the Red River from the proposed refuge headquarters site.

Recognizing that the proposed refuge has outstanding potential for environmental education and interpretation, the chancellor of LSU-Shreveport and several faculty members have endorsed the idea. Support has also been expressed by parish school superintendents and administrators.

In addition, the Service is working with several conservation organizations, energy consultants, and utility companies regarding the potential for carbon sequestration projects in the Red River Valley. In concept, the utility companies would acquire marginal agricultural lands, fund the reforestation of these lands, and then receive energy credits for sequestering carbon. If these lands are located within one of the refuge units, the Service would be funded by the utility companies to take over management responsibilities.

The Service's Lower Mississippi River Ecosystem Team (LMRET) has reviewed the Red River refuge proposal and endorsed the project. The LMRET indicates that protection of the proposed refuge lands and restoration of their wetland and riparian habitats would address several resource priorities identified in the team's ecosystem plan for the Lower Mississippi River Region.

E. U.S. Fish and Wildlife Service Land Acquisition Policy

The Service acquires lands and interests in lands, such as easements, and management rights in lands through leases or cooperative agreements, consistent with legislation or other Congressional guidelines and Executive Orders, for the conservation of fish and wildlife and to provide wildlife-dependent public uses for recreational and educational purposes. These lands include national wildlife refuges, national fish hatcheries, research stations, and other areas.

The Service's policy is to acquire land only from willing sellers. In accordance with Public Law 106-300, all lands acquired for the establishment of Red River National Wildlife Refuge will be only from willing sellers. When land is needed to achieve fish and wildlife conservation objectives, the Service seeks to acquire the minimum interests necessary to reach those objectives. If fee title is required, the Service gives full consideration to extended use reservations, exchanges, or other alternatives that will lessen the impact to the owner and the community. Donations of desired lands or interests are encouraged. In all fee title cases, the Service is required by law to offer 100 percent of the property's appraised market value, as set out in an approved appraisal that meets professional standards and federal requirements.

F. Public Participation

The public was notified of the proposed refuge and the availability of the Draft

Environmental Assessment and Land Protection Plan through a news release distributed on January 11, 2002. This news release summarized the proposal, invited comments from the public, and gave pertinent dates and other information necessary for public review and comment on the proposal. Copies of the document were provided to federal, state, parish, and local representatives, agencies, and interested groups, including landowners. Written comments were accepted through February 15, 2002.

At the close of the public review period, a total of 21 letters on the proposed refuge were received from the public.

While most of the comments were supportive, several issues were raised and addressed as follows:

Will public hunting and fishing be allowed? - Two citizens expressed concern over continuing the traditional public uses on the area, such as hunting and fishing. Appendices B and C include the Conceptual Management Plan and the Interim Compatibility Determination for the proposed refuge. The Conceptual Management Plan for the proposed Red River National Wildlife Refuge provides an overview of how the project lands would be managed until a Comprehensive Conservation Plan for the refuge is completed. The management goals of the proposed refuge would be to provide:

- Opportunities for compatible environmental education, interpretation, and wildlife-oriented recreation;
- Quality hunting and sportfishing opportunities;
- Habitat for migrating and wintering waterfowl;
- Nesting habitat for wood ducks;
- Habitats for a natural diversity of wildlife; and
- Habitat for non-game migratory birds.

The Interim Compatibility Determination (Appendix C) describes the wildlife-dependent recreational activities proposed on lands to be acquired as part of the Red River refuge and determines whether these activities are compatible with the purposes for which the refuge would be established. Under the National Wildlife Refuge System Improvement Act of 1997, the National Wildlife Refuge System Administration Act of 1966, and the Refuge Recreation Act of 1962, the Service may not permit public recreational activities on a national wildlife refuge unless the activities are first determined to be compatible with the purposes of the refuge. This Interim Compatibility Determination is intended to bridge the gap between acquisition of refuge lands and completion of a Comprehensive Conservation Plan.

Based on the available information, the Service has determined that the expected level of public sportfishing, hunting, and wildlife observation/photography activities that would occur within the proposed Red River NWR acquisition boundary is compatible with the purposes for which the refuge would be established.

The Red River project area has a history of substantial use for fishing and other wildlife-dependent recreational activities. Based on the available information, no adverse biological impacts from these activities are anticipated. Allowing well managed wildlife observation and photography, fishing, and hunting is consistent with the proposed refuge's goals and follows current Service policy.

Concern over the potential loss of agricultural land in the Unit - The Wardview Unit has been reduced from the Draft EA acreage of 27,743 acres to approximately 5,900 acres in size. These lands are located on the west side of the river. The actual acreage within the Wardview Unit would be relatively small to the total acreage of the refuge. Agricultural lands acquired by the Service would either be restored to prairie grass habitat (historical accounts describe the area as tallgrass prairie), reforested with bottomland hardwood species, or farmed under a cooperative farming program.

Fears of condemnation - Lands acquired by the Service for the refuge will be from willing sellers. In accordance with the Service's existing policy, the Service will not use condemnation, expropriation, or any other methods to force unwilling sellers to sell their lands.

Potential impacts on the rights of private landowners within or adjacent to an approved boundary for the refuge - Once the project lands are acquired by the Service, the Service's control of access, land use practices, water management, hunting, fishing, and general use is limited only to those lands in which the Service has acquired full or partial ownership of management rights. Any private landowners within an approved refuge boundary, even though the land surrounding them may have been purchased by the Service, will still retain all the rights, privileges, and responsibilities of private land ownership. This includes, but is not limited to, the right to access, hunting and fishing, vehicle use, control of trespass, the right to sell to any party, and the responsibility to pay local real estate or property taxes. Certain laws and regulations currently in effect govern activities on lands whether they are in private or public ownership. The establishment of a refuge would not change the application of these laws, which include the Endangered Species Act of 1973 and the Federal Water Pollution Control Act of 1972 (Clean Water Act).

II. ALTERNATIVES INCLUDING THE PROPOSED ACTION

In determining how to achieve the fish and wildlife habitat protection goals for the project lands identified in this document, the Service considered and evaluated three alternatives. These are:

A. Alternative 1: No Action

This is the "status quo" alternative. Under this alternative, the Service would not acquire any of the project lands identified in this proposal. The proposed project lands would remain in private ownership and current land uses would continue.

This alternative is standard in most environmental assessments; however, Congress has enacted Public Law 106-300 to establish the Red River National Wildlife Refuge and acquisition funds have been appropriated, so the "No Action" alternative is not appropriate. The Service has been directed by Congress to acquire up to 50,000 acres from within a selection area covering approximately 220,000 acres. Therefore, the major decision is where the Service should attempt to acquire these 50,000 acres. During the detailed planning for this project, the Service identified five units as priority sites for acquisition activities. The following alternatives are based on these potential areas.

B. Alternative 2: Protection and Management of up to 50,000 Acres from Five Units (Preferred Alternative)

Under this alternative, the Service would protect, restore, and manage lands in the Red River Basin by acquiring an interest in up to 50,000 acres from within the approximately 220,000-acre selection area identified in the enabling legislation. These 50,000 acres will be acquired from within five Units (Figure 2). At full attainment, the established refuge would consist of a complex of five separate refuge units, including a headquarters and visitor center site near Shreveport-Bossier City. This is the preferred alternative, as the Service has the expertise and means to manage these lands for their diversity of wildlife habitats, with special emphasis on migratory birds and endangered species. The five units include:

Lower Cane River (Natchitoches Parish) - A 14,397-acre area approximately 20 miles south of Natchitoches and located between State Highway 1 and the Red River. This area is north of the confluence of Lower Cane River and Red River, south of Bayou Bourbeaux (Figure 3).

Bayou Pierre Floodplain (Desoto and Red River Parishes) - This 17,068-acre area is bounded by U.S. Highway 84 on the south, Bayou Pierre on the west, and a line that runs south of the state highway that runs west from Williams on the north, and the Red River on the east (Figure 4).

Spanish Lake Lowlands (Natchitoches Parish) - This 11,409-acre area would begin at the hill line just north of Natchitoches. Bayou Pierre, Little River, and Johnson Chute are in the southern part of this area. State Highway 485 is on the west and north, and Bayou Pierre on the east (Figure 4).

Headquarters Site (Bossier Parish) - This 756-acre site includes Eagle Bend Point and is located along the east side of the Red River in the Bossier City limits just

south of the Jimmie Davis Bridge (Figure 5).

Wardview (Caddo and Bossier Parishes) - This 5,862-acre site of elevated lands is adjacent (along the west side) to a natural 10-mile section of the Red River. Streams and waterbodies include Halfmoon Lake, Palmetta Lake, Stillhouse Bayou, and Scotts Slough. This area is bordered on the north by the Arkansas state line, on the south by a east-west line from Kelly Bayou to the Red River, the Red River on the east, and Kelly Bayou on the west (Figure 6).

The land acquisition methods that could be used by the Service under this alternative are described as follows:

Leases and Cooperative Agreements

Potentially, the Service can protect and manage habitat through leases and cooperative agreements. Management control on privately owned lands could be obtained by entering into long-term renewable leases or cooperative agreements with willing landowners. Short-term leases can be used to protect or manage habitat until more secure land protection can be negotiated.

Conservation Easements

Conservation easements give the Service the opportunity to manage lands for their fish and wildlife habitat values. Such management precludes all other uses that are incompatible with the Service's management objectives. Only land uses that would have minimal or no conflicts with the management objectives are retained by the landowner. In effect, the landowner transfers certain development rights to the Service for management purposes as specified in the easement.

Easements would likely be useful when (1) most, but not all, of a private landowner's uses are compatible with the Service's management objectives, and (2) the current owner desires to retain ownership of the land and continue compatible uses under the terms set by the Service in the easement.

Land uses that are normally restricted under the terms of a conservation easement include:

- Development rights (agricultural, residential, etc.);
- Alteration of the area's natural topography;
- Uses adversely affecting the area's floral and faunal communities;
- Private hunting and fishing leases; and

Figure 2. Proposed refuge units for the establishment of Red River National Wildlife Refuge.

Figure 4. Proposed lands of Bayou Pierre Floodplain and Spanish Lake Lowlands Units, Red River National Wildlife Refuge under Alternative 2.

Figure 3. Proposed lands of Lower Cane River Unit, Red River National Wildlife Refuge under Alternative 2.

Figure 5. Proposed lands of the Headquarters Unit, Red River National Wildlife Refuge under Alternative 2

Figure 6. Proposed lands of Wardview Unit, Red River National Wildlife Refuge under Alternative 2

- Excessive public access and use.

Fee Title Acquisition

A fee title interest is normally acquired when (1) the area's fish and wildlife resources require permanent protection not otherwise assured; (2) a pending land use could or continues to adversely impact the area's resources; (3) it is the most practical and economical way to assemble small tracts into a manageable unit; or (4) land is needed for visitor use development.

Fee title acquisition conveys all ownership rights to the federal government and provides the best assurance of permanent resource protection. A fee title interest may be acquired by donation, exchange, transfer, or purchase.

C. Alternative 3: Protection and Management of up to 50,000 Acres at an Expanded Bayou Pierre Unit

Under this alternative, the Service would protect, restore, and manage lands within the Red River Basin by acquiring an interest in up to 50,000 acres at the expanded Bayou Pierre Unit (Figure 7).

III. AFFECTED ENVIRONMENT

This section describes the area's natural environment, including vegetation, fish and wildlife resources, and cultural resources. The area's socioeconomic and sociocultural conditions and land uses that could be affected by the proposed action are also discussed.

A. General

The Red River originates in the plains of New Mexico, heads east to divide Texas and Oklahoma, turns south through southwestern Arkansas, and then travels southeast through the Louisiana farm belt toward the Mississippi River. In Louisiana, the Red River Valley contains some 800,000 acres of land from Alexandria to the Arkansas border.

Early explorers to the Red River Valley in Louisiana found a beautiful river, wide and deep with a gentle current and steep banks. Most of the adjacent floodplain was forested with a diverse hardwood forest comprised of numerous species that were adaptable to the varying and complex soil and moisture conditions. A large prairie was reported north of Shreveport. Over the years, the Red River Valley became the most degraded watershed in Louisiana. The valley was almost totally cleared of its forest cover beginning in the 1820s, primarily for cotton production. The Red is a disjunct tributary of the Mississippi River, which was heavily degraded beginning in

Figure 7. Proposed lands for the establishment of Red River National Wildlife Refuge

under Alternative 3.

the 1800s and continuing on through the soybean boom of the late 1960s.

B. Land Use and Vegetation

The Red River has a narrow floodplain, averaging 6-8 miles in width. Lands in the Red River Valley can, in general, be classified as alluvial floodplain or terrace uplands. The alluvial soils are highly fertile and can support a diverse bottomland hardwood forest and produce excellent agricultural crops. After the massive land clearing efforts, large farms and plantations were established on the alluvial plain and small farms were started on the uplands. Over time, most of these small upland farms have been converted to commercial pine forests and pastures. In the alluvial plain, the number of farms continues to decrease while the average size of the farms is increasing. The most commonly grown crops include cotton, soybeans, winter wheat, and rice.

Since the completion of the Red River Waterway Project, the water levels in the river are higher and more constant which have greatly reduced the turbidity. The river's water quality has also improved, and the seasonal retention of water levels has resulted in the development of a rich diversity of aquatic plants. Backwater areas include dead timber zones and new growths of willows and cypress. The increased water levels on the river have also created shallow water areas in many of the farm fields and pastures near the river. Reforestation programs such as the WRP and CRP are popular in the project area, and significant acreages of cropland have been converted to future forests.

C. Wildlife Resources

The Red River is an historic migration corridor for migratory birds that use the Central and Mississippi Flyways on their journeys to the Gulf Coast and points beyond. From the early 1800s to the late 1900s, migratory bird use of the Red River was temporary as most birds would quickly move down the river corridor to traditional habitats in central and southern Louisiana. However, with completion of the Red River Waterway Project, increased rice production, improved production on the breeding grounds, and management actions by governmental agencies, conservation organizations, and private landowners in the area, habitat conditions have improved and migratory bird numbers and diversity have increased. Waterfowl hunting is extremely popular, as evidenced by the number of hunting blinds along the river and in the newly formed backwater areas. Species range from divers such as scaup, ring-necked duck, redhead, and canvasback to traditional puddle ducks like mallard and teal.

Neotropical migrants are birds that nest in North America and spend their nonbreeding seasons in Mexico, Central or South America, or the Caribbean. Many of these birds use the Red River Valley for migration and breeding. More than 300 species of birds use the Red River at various times of the year, including endangered species such as the bald eagle and the interior least tern which nests on riverine sandbars. Other migratory birds such as woodcock and mourning dove

are common in the cleared fields. Wading birds and shorebirds are numerous on sandbars, shallow flooded fields, and mudflats.

Resident game and furbearer species along the river include white-tailed deer, swamp rabbit, cottontail rabbit, gray and fox squirrels, mink, muskrat, beaver, fox, and coyote. The area also supports a variety of nongame mammals, amphibians, and reptiles.

D. Fishery Resources

The Red River and its associated river basin supports 133 species of fish including 39 minnows, 26 darters, and 16 sunfishes. Both sport and commercial fishermen utilize this resource. The Red River Waterway Project created new flooded timber, oxbow lakes, and sloughs that provide seasonal reproductive and nursery habitat annually. Game species such as largemouth bass, striped bass, crappie, bream, and catfish are found in good numbers. Bass fishing has become so popular and productive that several major fishing tournaments are held annually on the Red River. Big river species such as carp, freshwater drum, shovelnose sturgeon, buffalo and gar are also found in good numbers. Two species of management concern, the blue sucker and paddlefish, are also found in the Red River.

E. Socioeconomic and Sociocultural Conditions

The socioeconomic and sociocultural conditions vary considerably throughout the project area. The refuge Units in Caddo and Bossier Parishes are influenced by the demographics of Shreveport and Bossier City. Major industries in this urban area include entertainment, medical, and manufacturing. The Units in Desoto, Red River, and Natchitoches Parishes do not have large urban centers and farming and commercial timber production are major influences on the economy and culture.

Outdoor recreation pursuits such as hunting and fishing are traditional and favored pastimes for local residents and tourists. The State of Louisiana manages two wildlife management areas and several public lakes within the project area. In addition, the leasing of private land for hunting is becoming increasingly popular.

If the proposed lands are acquired for Red River National Wildlife Refuge, the cost would be based on the fair market values of the properties as determined by appraisals. The area's establishment as a unit of the National Wildlife Refuge System would cause some land use changes. The restoration of bottomland hardwood habitat will be a priority management objective and therefore some of the farmlands acquired will be taken out of production. This could adversely affect some tenant farmers if they are unable to find replacement lands. Some of the acquired farmlands will continue to be farmed under a cooperative agreement with the Service. On these lands, the current farmer will be given the first option to continue farming under a cooperative agreement, where 25% of the crop will remain in the fields for wildlife. The anticipated land use changes on a portion of 50,000 acres are not expected to cause any significant economic or sociocultural impacts to

the local communities.

F. Cultural Resources

Section 106 of the National Historic Preservation Act of 1966, as amended, and Section 14 of the Archeological Resources Protection Act require the Service to evaluate the effects of any of its actions on cultural resources (historic, architectural, and archeological) that are listed or eligible for listing in the National Register of Historic Places (NRHP). In accordance with these regulations, the Service has requested information on the presence of any known cultural resources on the proposed refuge areas from the State of Louisiana's Historic Preservation Office.

The Service believes that the proposed acquisition of lands will have no effect on any known or yet-to-be identified NRHP-eligible cultural resources. However, in the future, if the Service plans or permits any actions that might affect eligible cultural resources, it will carry out appropriate site identifications, evaluations, and protection measures as specified in the regulations and in Service directives and manuals.

IV. ENVIRONMENTAL CONSEQUENCES

This section analyzes and discusses the potential environmental impacts of Alternatives 2 and 3 as described in Section II. Alternative 1, the "No Action" alternative, is not applicable because Congress has enacted Public Law 106-300 to establish the Red River National Wildlife Refuge.

A. Alternative 2: Protection and Management of up to 50,000 Acres from Five Units (Preferred Alternative)

This alternative would establish the Red River National Wildlife Refuge as a chain of five refuge units within the Red River Valley. The Service would protect, restore, and manage lands in the Red River Basin by acquiring an interest in up to 50,000 acres from within the approximately 220,000-acre selection area identified in the enabling legislation. These 50,000 acres will be acquired from within five units, and at full attainment the established refuge will consist of a complex of these five separate refuge units. This would allow the Service to actively manage these lands on a landscape basis for a wide variety of fish and wildlife, including migrating and wintering waterfowl, endangered species, and neotropical migratory birds.

The five units were selected based on their natural resource values, management potential, restoration possibilities, hydrologic/watershed influences, partnership opportunities and proximity to development (current and projected).

Lower Cane River (14,397 acres in Natchitoches Parish) - Waterfowl management opportunities in this area are excellent. A combination of rice fields, oxbow lakes, flooded timber, and wet fields attracts and holds several thousand ducks and geese annually. Partnership opportunities are available with the Red River Waterway

Commission and the USDA's Natural Resources Conservation Service.

Spanish Lake Lowlands (11,409 acres in Natchitoches Parish) - This low-lying wet area is characterized by fallow fields, wet pasture lands, and rice/soybean farms. Excellent migratory bird habitat is present and outstanding opportunities exist for reforestation projects. Partnership possibilities include federal agencies and private companies with interests in reforestation.

Bayou Pierre Floodplain (17,068 acres in Desoto and Red River Parishes) - This area offers a wide diversity of habitat types including a large cypress brake, abandoned catfish ponds that are currently being managed for waterfowl, rice fields, CRP lands, and lands suitable for reforestation. Partnership opportunities exist in this area with a national conservation organization.

Headquarters Site (756 acres in Bossier Parish) - This area includes high ground for a headquarters/visitor center, plus a large wetland complex for environmental education and interpretation activities. Excellent partnership options exist with LSU-Shreveport, the Sci-Port Development Center, and a national conservation organization.

Wardview (5,862 acres in Caddo and Bossier Parishes) - This area includes higher elevation cotton land on the west side of the Red River. Historical accounts of this area described it as a tallgrass prairie. Good possibilities exist for waterfowl management, bottomland hardwood reforestation, and prairie grass reintroduction. Partnerships may include conservation organizations such as Quail Unlimited, the Wild Turkey Federation, and Ducks Unlimited.

Currently, there are no national wildlife refuges in northwestern Louisiana. In fact, this part of the state is the only section of Louisiana without a national wildlife refuge. The closest refuges along the Red River are Little River National Wildlife Refuge in Oklahoma and Lake Ophelia National Wildlife Refuge near Marksville in central Louisiana. There are also no significant state or private waterfowl sanctuaries along the Red River between Alexandria, Louisiana, and Texarkana, Arkansas.

Waterfowl habitat has improved over the last few years and as a result, waterfowl numbers and diversity have increased. However, as the popularity of waterfowl hunting, fishing, and boating on the river continues to grow, the establishment of strategically located waterfowl resting areas will be a key to maintaining large populations of ducks for hunting and wildlife observation. There are no current waterfowl resting areas along the Red River in northwest Louisiana.

Service acquisition and management of Red River National Wildlife Refuge would contribute to the goals identified in the North American Waterfowl Management Plan (NAWMP) and the Lower Mississippi River Joint Venture (LMJVJ). The riverine habitats, shallow water areas, and flooded fields of the proposed refuge would help to meet the foraging habitat objectives for ducks as identified in the NAWMP and

the LMVJV; the fall migration foraging habitat needs for shorebirds; and the foraging habitat requirements for some neotropical migratory birds.

Breeding bird surveys and several other data sources have documented long-term population declines in neotropical migrants and other forest-dwelling species due to habitat losses in wintering, breeding, and migration areas, as well as a number of other factors. Forest fragmentation in the Red River Valley has undoubtedly contributed to those declines. Priority species for bird conservation in the proposed Red River refuge include the swallow-tailed kite, cerulean warbler, Swainson's warbler, American woodcock, yellow-billed cuckoo, prothonotary warbler, worm-eating warbler, Louisiana waterthrush, Kentucky warbler, and hooded warbler. Restoration and management of habitats for these species is considered critical.

Federally listed species such as the bald eagle and interior least tern will benefit from reforestation projects and habitat protection. Aquatic species will benefit from improved water quality and decreased sedimentation as a result of forested riparian corridors and vegetated filter strips.

The proposed refuge units also offer outstanding potential for fish and wildlife-oriented public uses such as hunting, fishing, birdwatching, and environmental education. Because of their proximity to the cities of Shreveport, Bossier City, and Natchitoches, school groups and visitors would have easy access to the refuge.

The establishment of Red River National Wildlife Refuge would provide increased public use opportunities and may also increase visitations to the area. This increased tourism would be a positive economic influence on the surrounding local communities.

The river's alluvial floodplain offers excellent opportunities to restore the historic hydrology of many areas adjacent to the river; reestablish a high value bottomland hardwood forest; manage selective farmland for ducks, geese, and other wildlife; provide seasonal shallow water management on forested/non-forested habitats; and stabilize habitats for the long term. All of these activities will also work to improve the water quality conditions downstream of the refuge, and therefore result in a positive effect for aquatic species near the project.

The purpose of Red River National Wildlife Refuge would be to restore, enhance and manage the proposed refuge lands for the benefit of both game and nongame species. Traditional fish and wildlife uses, such as hunting and fishing, would be maintained whenever they are compatible with refuge objectives. Currently, the area's hunting and fishing are controlled by landowners and public access is restricted. Establishment of the refuge would offer outstanding opportunities for public use.

The proposed refuge is endorsed by the Service's Lower Mississippi River Ecosystem Team (LMRET), whose purpose is to enhance, restore, and conserve the naturally occurring habitat types and functional values of the Lower Mississippi

River Ecosystem Unit while maintaining the economic productivity and recreational opportunities of the region.

One of the primary goals of the LMRET is to maintain, manage, and restore the values and functions of alluvial plain habitats. One objective is to restore and manage the wetlands and water quality functions of alluvial soils through the seasonal ponding of rainfall and runoff. A strategy is to restore and manage the wetland hydrology of forested, moist soil, and cropped wetlands on public lands to provide food and foraging habitat for migratory waterfowl, wading birds, and shorebirds.

Another objective is to protect and restore the values and functions of bottomland hardwood forest habitats as needed to support trust species, minimize and reverse habitat fragmentation, and restore the contiguity of forested wetland complexes. A strategy is to maintain, restore, and manage the forested acreage on national wildlife refuges as wintering habitat for migratory waterfowl and to provide for complexes of habitats important to many waterfowl species.

Protection and management of the proposed refuge would contribute to these goals through the management of seasonal ponding and shallow flooding for migratory birds. In addition, the reestablishment of bottomland hardwoods on portions of the Red River floodplain would create wintering habitat for several species of ducks.

Another goal is to manage and protect populations of federal trust and interjurisdictional species such as migratory birds. An objective is to manage migratory bird populations in partnership with other federal and state agencies and private landowners. One strategy is to provide food, protection, and sanctuary for migratory waterfowl on federal, state, and private lands sufficient to maintain desirable distributions.

The Ecosystem Plan also includes a goal to increase public awareness and support for ecosystem resources and their management. The objective is to promote increased stewardship of the ecosystem resources through environmental education, interpretation, and other outreach methods. One strategy would be to place emphasis on special designation areas, such as national wildlife refuges, through increased outreach activities.

Acquisition and management of the proposed Red River refuge would contribute to several ecosystem goals through the management of bottomland hardwood and wetland habitats for migratory waterfowl, neotropical songbirds, and bald eagles and the development of public outreach activities.

A Fisheries and Aquatic Resources Strategic Plan for the Southeast Region was prepared by the Service in June 1997. This plan defines the major issues facing fisheries and aquatic resources in the Southeast and describes the actions planned to be undertaken in addressing these issues. The plan identifies several objectives for restoring and managing populations of fish and other aquatic resources. The

proposed Red River refuge would enable the Service to support the following objectives:

- Take part in interagency planning and coordination for the Red River fisheries;
- Protect, restore, and enhance the Red River fisheries habitat;
- Assist the states and other partners in conserving, recovering, or restoring Red River fishery populations;
- Assist the states and other federal agencies with the enforcement of laws affecting Red River fisheries conservation; and
- Develop greater public awareness of the Red River's fishery problems and the solutions to them.

Based on the nature of the proposal, the locations of the proposed refuge sites, and the current land uses, the preferred alternative would not have any significant effects on the quality of the human environment, including public health and safety. Further, because the purpose of the proposal is to manage, restore, enhance, and protect the habitats within the proposed acquisition areas, the proposal is not expected to have any significant adverse effects on the area's wetlands and floodplains, pursuant to Executive Orders 11990 and 11988.

Additionally, implementation of the preferred alternative will not involve any highly uncertain, unique, unknown, or controversial effects on the human environment. The proposed action will not establish a precedent for future actions with significant effects, nor does it represent a decision in principle about a future consideration. No cumulatively significant negative impacts on the environment are anticipated.

In addition, the proposal will not significantly affect any unique characteristic of the geographic area, such as historical or cultural resources, wild and scenic rivers, or ecologically critical areas. Nor will the proposal significantly affect any site listed in or eligible for listing in the National Register of Historic Places, nor will it cause the loss or destruction of significant scientific, cultural, or historic resources. In addition, the area's cultural resources would be protected under the regulations of the National Historic Preservation Act of 1966, as amended, the Archeological Resources Protection Act, and the Advisory Council on Historic Preservation (36 CFR 800). The State of Louisiana's Historic Preservation Office would be contacted whenever any future management activities have the potential to affect cultural resources sites.

No actions will be taken that would lead to a violation of federal, state, or local laws imposed for the protection of the environment. The Service will coordinate with other state and federal agencies in these efforts. For example, the Service will work with the Federal Highway Administration and state transportation officials in identifying the best corridor for Interstate Highway 69.

All tracts acquired by the Service will be removed from local real estate tax rolls because federal government agencies are not required to pay state or local taxes. However, the Service makes annual payments to local governments in lieu of real estate taxes, as required by the Refuge Revenue Sharing Act (Public Law 95-469). Payment for acquired land is computed on whichever of the following formulas is greatest: (1) three-fourths of 1% of the fair market value of the lands acquired in fee title; (2) 25% of the net refuge receipts collected; or (3) 75 cents per acre of the lands acquired in fee title within the parish.

The Red River Waterway Project was designed to promote water transportation north and south along the river. Ports have developed at Shreveport / Bossier City, Natchitoches, and Alexandria, with a variety of products shipped by barge up and down the river. Some of these products, such as jet fuel and liquid creosote, are potential contaminants that could cause significant pollution problems in the event of a major accident or mishap. However, since the beginning of the waterway's operation in 1994, no significant accidents or spills have occurred. There is no apparent evidence of the generation, use, storage, or disposal of hazardous materials on the proposed refuge lands.

B. Alternative 3: Protection and Management of up to 50,000 Acres at Bayou Pierre Expanded Unit

Under this alternative, the Bayou Pierre Unit would be expanded to the north and east to encompass a total of up to 50,000 acres. This expanded area would include several natural wetlands, small blocks of bottomland hardwoods, and several sites for reforestation projects. For the purpose of establishing the refuge, the Service would acquire only the lands within this Unit, and future management costs would be less than in Alternative 2. A headquarters and visitor center would be located in this area and not in the Shreveport-Bossier City area. This alternative would also significantly reduce the land acquisition and management costs. In general, the environmental consequences of this alternative would be similar to those described under Alternative 2.

A negative aspect of this alternative would be the missed opportunities for landscape management within the Red River Valley. By establishing a chain of five refuge units from Colfax to the Arkansas state line, as proposed in Alternative 2, the possibilities for partnerships and shared management options are much greater.

A major issue which was addressed in the legislative history of Public Law 106-300 concerns the avoidance of conflicts between the proposed refuge and other interests such as navigation, port development, transportation, etc. Alternative 2 was designed to avoid conflicts with these uses. Under Alternative 3, the risk for conflict would be greater due to the proposed Interstate Highway 69 corridor.

Under this alternative, no action would be taken to acquire any lands within the Wardview, Spanish Lake, Lower Cane River, or Headquarters Site units. The lands

in those four units will remain in private ownership and current land uses would continue. Enhancement, restoration, and management of the fish and wildlife habitats of these other four Units and their natural resource values would be left to the discretion of the private landowners. Currently, several wildlife habitat improvement programs such as the WRP and CRP are offered by the NRCS in these areas.

Under this alternative, any significant cultural and historic resources within the other four units would remain in private ownership and the protection offered by existing state and federal laws would apply. This protection is limited, however, and the area's cultural and historic resources would be subjected to greater risks of loss during potential land use changes.

Caddo, Bossier, and Natchitoches Parishes would receive no payments from the Refuge Revenue Sharing Act under this alternative, and public use would continue to be restricted.

Therefore, the Service's desired fish and wildlife habitat enhancement, restoration, and landscape management objectives cannot be achieved under this alternative.

V. INFORMATION ON PREPARERS

This document was prepared by Mike Dawson, Project Development Biologist, USFWS, Jackson, Mississippi, with the assistance of George Chandler, Refuge Manager, North Louisiana National Wildlife Refuges Complex, Monroe, Louisiana; Brett Hortman, Fishery Biologist, Natchitoches National Fish Hatchery, Natchitoches, Louisiana; John Watkins, GIS Specialist, USFWS, Atlanta, Georgia; and Rose Hopp and Jim Wood, Division of Planning, USFWS, Atlanta, Georgia.

VI. SUMMARY OF PROPOSED ACTION

As previously described, the Service proposes to protect, restore, and manage approximately 50,000 acres from five units within a selection area of over 220,000 acres. The lands within these five units would be acquired through a combination of fee title purchases from willing sellers and conservation easements, leases, and/or cooperative agreements from willing landowners. The Service believes these are the minimum interests necessary to restore and enhance the fish and wildlife resources in the proposed Red River National Wildlife Refuge.

The private property has been prioritized for acquisition using the following criteria:

- Biological significance;
- Restoration potential;

- Significance of the area to refuge management and administration; and
- Ownership interest and land availability.

Priority Group I

The key tracts within each of the Units are the first priority for acquisition. This includes 70 tracts totaling approximately 29,800 acres. These lands offer excellent opportunities for high quality waterfowl habitat enhancement and habitat restoration.

Priority Group II

The other lands (19,800 acres) within the Units are the second priority. In addition to the preceding criteria, lands within Priority Group II will be evaluated on their linkage and expansion capabilities. For example, acquisition of a tract that would establish a linkage between other protected sites or build a larger unit would be a priority (Figures 8, 9, 10 and 11).

Table 1. Protection priorities for the proposed Red River National Wildlife Refuge and recommended methods of acquisition.

| Priority Group | No. of Landowners | Approx. Acreage | Type of Acquisition (minimum interest) |
|----------------|-------------------|-----------------|---|
| I | 70 | 29,800 | Lease, conservation easement, cooperative agreement, or fee title |
| II | 53 | 19,800 | Fee title, lease, conservation easement, or cooperative agreement |

Figure 8. Land acquisition priorities for Lower Cane River Unit, Red River National Wildlife Refuge.

Figure 9. Land acquisition priorities for Bayou Pierre Floodplain and Spanish Lake Lowlands Areas, Red River National Wildlife Refuge.

Figure 10. Land acquisition priorities for the Headquarters Unit, Red River National Wildlife Refuge.

Figure 11. Land acquisition priorities for Wardview Unit, Red River National Wildlife Refuge.

APPENDIX A

THE RED RIVER NATIONAL WILDLIFE REFUGE ACT PUBLIC LAW 106-300 106th Congress

An Act

To establish the Red River National Wildlife Refuge.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress:

SECTION 1. SHORT TITLE.

This Act may be cited as the "Red River National Wildlife Refuge Act."

SECTION 2. FINDINGS.

The Congress finds the following:

- (1) The area of Louisiana known as the Red River Valley, located along the Red River Waterway in Caddo, Bossier, Red River, Natchitoches, and De Soto Parishes, is of critical importance to over 350 species of birds (including migratory and resident waterfowl, shore birds, and neotropical migratory birds), aquatic life, and a wide array of other species associated with river basin ecosystems.
- (2) The bottomland hardwood forests of the Red River Valley have been almost totally cleared. Reforestation and restoration of native habitat will benefit a host of species.
- (3) The Red River Valley is part of a major continental migration corridor for migratory birds funneling through the mid continent from as far north as the Arctic Circle and as far south as South America.
- (4) There are no significant public sanctuaries for over 300 river miles on this important migration corridor, and no significant Federal, State, or private wildlife sanctuaries along the Red River north of Alexandria, Louisiana.
- (5) Completion of the lock and dam system associated with the Red River Waterway project up to Shreveport, Louisiana, has enhanced opportunities for management of fish and wildlife.
- (6) The Red River Valley offers extraordinary recreational, research, and educational opportunities for students, scientists, bird watchers, wildlife observers, hunters, anglers, trappers, hikers, and nature photographers.

- (7) The Red River Valley is an internationally significant environmental resource that has been neglected and requires active restoration and management to protect and enhance the value of the region as a habitat for fish and wildlife.

SECTION 3. ESTABLISHMENT AND PURPOSES OF REFUGE.

(a) Establishment.—

- (1) In general.—The Secretary shall establish the Red River National Wildlife Refuge, consisting of approximately 50,000 acres of Federal lands, waters, and interests therein within the boundaries depicted upon the map entitled "Red River National Wildlife Refuge—Selection Area," dated September 5, 2000.
- (2) Boundary revisions.—The Secretary shall make such minor revisions of the boundaries of the Refuge as may be appropriate to carry out the purposes of the Refuge or to facilitate the acquisition of property within the Refuge.
- (3) Availability of map.—The Secretary shall keep the map referred to in paragraph (1) available for inspection in appropriate offices of the United States Fish and Wildlife Service.

(b) Purposes.—The purposes of the Refuge are the following:

- (1) To provide for the restoration and conservation of native plants and animal communities on suitable sites in the Red River basin, including restoration of extirpated species.
- (2) To provide habitat for migratory birds.
- (3) To provide technical assistance to private land owners in the restoration of their lands for the benefit of fish and wildlife.

(c) Effective Date.—The establishment of the Refuge under paragraph (1) of subsection (a) shall take effect on the date the Secretary publishes, in the Federal Register and publications of local circulation in the vicinity of the area within the boundaries referred to in that paragraph, a notice that sufficient property has been acquired by the United States within those boundaries to constitute an area that can be efficiently managed as a National Wildlife Refuge.

SECTION 4. ADMINISTRATION OF REFUGE.

(a) In General.—The Secretary shall administer all lands, waters, and interests therein acquired under Section 5 in accordance with:

- (1) the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd et seq.) and the Act of September 28, 1962 (76 Stat. 653; 16 U.S.C.

460k et seq.; commonly known as the Refuge Recreation Act);

(2) the purposes of the Refuge set forth in Section 3(b); and

(3) the management plan issued under subsection (b).

(b) Management Plan.--

(1) NOTE: Deadline - In general.--Not later than 18 months after the date of the establishment of the Refuge, the Secretary shall issue a management plan for the Refuge.

(2) Contents.--The management plan shall include provisions that provide for the following:

(A) Planning and design of trails and access points.

(B) Planning of wildlife and habitat restoration, including reforestation.

Permanent exhibits and facilities and regular educational programs throughout the Refuge.

(D) Ensuring that compatible hunting, fishing, wildlife observation and photography, and environmental education and interpretation are the priority general public uses of the Refuge, in accordance with Section 4(a)(3) and (4) of the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668ee(a)(3), (4)).

(3) Public participation.--

(A) In general.--The Secretary shall provide an opportunity for public participation in developing the management plan.

(B) Local views.--The Secretary shall give special consideration to views by local public and private entities and individuals in developing the management plan.

(c) Wildlife Interpretation and Education Center.--

(1) In general.--The Secretary shall construct, administer, and maintain, at an appropriate site within the Refuge, a wildlife interpretation and education center.

(2) Purposes.--The center shall be designed and operated:

(A) to promote environmental education; and

(B) to provide an opportunity for the study and enjoyment of wildlife in its natural habitat.

(d) Assistance to Red River Waterway Commission.--The Secretary shall provide to the

Red River Waterway Commission—

- (1) technical assistance in monitoring water quality, noxious plants, and exotic organisms, and in preventing siltation of prime fisheries habitat; and
- (2) where appropriate and available, fish for stocking.

SECTION 5. ACQUISITION OF LANDS, WATERS, AND INTERESTS THEREIN.

In General.—The Secretary may acquire up to 50,000 acres of lands, waters, or interests therein within the boundaries of the Refuge described in Section 3(a)(1).

- (b) Inclusion in Refuge.—Any lands, waters, or interests acquired by the Secretary under this section shall be part of the Refuge.

SECTION 6. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Secretary such sums as may be necessary to carry out this Act.

SECTION 7. DEFINITIONS.

For purposes of this Act:

- (1) Refuge.—The term “Refuge” means the Red River National Wildlife Refuge established under Section 3.
- (2) Secretary.—The term “Secretary” means the Secretary of the Interior.

Approved October 13, 2000.

LEGISLATIVE HISTORY—H.R. 4318:

HOUSE REPORTS: No. 106-809 (Comm. on Resources).

SENATE REPORTS: No. 106-462 (Comm. on Environment and Public Works).

CONGRESSIONAL RECORD, Vol. 146 (2000):

Sept. 12, considered and passed House.

Oct. 4, considered and passed Senate.

APPENDIX B

CONCEPTUAL MANAGEMENT PLAN FOR THE PROPOSED RED RIVER NATIONAL WILDLIFE REFUGE, LOUISIANA

INTRODUCTION

This Conceptual Management Plan for the proposed Red River National Wildlife Refuge (NWR) is an overview of how the lands would be managed until a Comprehensive Conservation Plan for the refuge is completed. A Conceptual Management Plan does not detail where facilities would be located or show where public use would be allowed. These details will be included in a Comprehensive Conservation Plan, for which public input will be solicited.

The proposed Red River NWR would encompass up to 50,000 acres in Caddo, Bossier, Red River, DeSoto, and Natchitoches Parishes of Louisiana.

MANAGEMENT GOALS

The goals of the proposed refuge would be to provide:

- Opportunities for compatible environmental education, interpretation, and wildlife-oriented recreation;
- Quality hunting and sport fishing opportunities;
- Habitat for migrating and wintering waterfowl;
- Nesting habitat for wood ducks;
- Habitats for a natural diversity of wildlife; and
- Habitat for non-game migratory birds.

REFUGE ADMINISTRATION

The proposed refuge unit would be administered and managed by personnel assigned to Red River NWR. Until the Comprehensive Conservation Plan is developed, the proposed refuge would be managed in much the same manner as other national wildlife refuges. The Service's Southeast Regional Office in Atlanta, Georgia, would provide technical assistance on such matters as engineering, public use planning, and migratory bird management.

HABITAT MANAGEMENT

Historically, the Red River Valley was forested with bottomland hardwoods, cypress sloughs, and shrub swamps. After the Louisiana Purchase in 1803, early settlers began to clear these areas for farms and homesteads. This clearing rate was rapidly accelerated in the 1960s and 1970s with the rise in soybean prices. During the last three decades, the Red River Valley was used extensively for agricultural production. The river itself was usually very turbid, and its wildlife and fishery habitats were considered poor compared to those in other parts of the state.

In 1964, Congress authorized construction of the Red River Waterway Project. This project, completed in 1994, consists of five lock and dam complexes located between the Old River Lock on the Mississippi River to the I-220 bridge in Shreveport-Bossier City. Since the completion of the Waterway Project, habitats for certain species of wildlife (i.e., migratory waterfowl) and fish (i.e., largemouth bass) have improved. The river's water levels are now higher and more constant, and its turbidity levels have been greatly reduced. Water quality has improved and the seasonal retention of water levels has resulted in the development of a rich diversity of aquatic plants.

The increased water levels on the river have also improved some adjacent habitats. Flooded timber and farm fields with wet, depressional areas are now common. USDA programs such as the Wetlands Reserve Program and Conservation Reserve Program are restoring valuable wildlife habitat through the reforestation of prior converted wetlands in the Red River Valley. Changes in agricultural practices have resulted in an increase in rice production and additional migratory bird habitat.

With strategically installed water control structures on refuge lands and an active private lands program conducted off-refuge, the frequency of significant waterfowl occurrence could be greatly enhanced and would not be dependent on floodwaters. Some of the lands to be acquired are currently in rice production and portions of these lands would remain in agriculture to provide the "hot food" component for wintering waterfowl.

The Service is already partnering with Environmental Synergy, American Electric Power, and others to do extensive reforestation on thousands of acres of reclaimed agricultural lands. The Service is also working with the Red River Waterway Commission and the Corps of Engineers to identify key mitigation lands along the Red River Waterway.

FISH AND WILDLIFE POPULATION MONITORING

Periodic surveys would be conducted on the refuge to document the occurrence of species, and to assess population numbers and habitat use. Surveys include waterfowl counts, non-game bird inventories, nesting surveys, endangered species monitoring, habitat monitoring, and breeding bird surveys. Banding and marking of wildlife may also be conducted.

Educational institutions, other governmental agencies, and private groups may be allowed to conduct surveys or research on the refuge.

PUBLIC USE OPPORTUNITIES AND MANAGEMENT

The National Wildlife Refuge System Improvement Act of 1997 emphasizes the importance of providing wildlife-dependent recreational opportunities on national wildlife refuges as long as they are compatible with the goals of the refuge. Public use opportunities would likely include both consumptive (hunting and fishing) and non-consumptive uses (wildlife observation and photography, and environmental education and interpretation).

The following public use regulations, common to many national wildlife refuges, would be adopted to achieve the management goals for the refuge:

Public entry would usually be permitted year round in those areas shown in a refuge leaflet and marked by appropriate signs.

Use of the refuge for most activity would generally be limited to daylight hours only. No camping or overnight parking would be permitted.

Possessing or discharging firearms would be prohibited except during established hunting seasons in areas open to hunting.

Collecting any plant or animal would be prohibited unless otherwise specified.

No person would be allowed to search for, disturb, or remove from the refuge any cultural artifact or other historical artifact.

Directing the rays of any artificial light for the purpose of spotting, locating, or taking any animal would be prohibited unless it is in connection with an approved activity (i.e., raccoon hunting).

Entering or remaining on the refuge while under the influence of alcohol or other drugs would be prohibited.

Fires would generally not be permitted except for agricultural and forestry management practices.

Dogs and other pets would have to be kept under control at all times except when specifically allowed.

Visitor Access

Some areas may be closed to visitors at certain times of the year to protect sensitive wildlife and their habitat (e.g., a heron rookery). Signs and leaflets would clearly indicate the open and closed areas of the refuge. The needs of physically challenged persons would be considered and included during access planning for any refuge activity or facility.

Hunting

Recreational hunting of resident game and migratory birds would be permitted within the framework of state and federal regulations and licensing requirements. Seasons, areas and types of hunting would be determined by safety, management needs, wildlife populations, size of area, location and public need. Refuge-specific hunting regulations would be coordinated in annual meetings with the Louisiana Department of Wildlife and Fisheries.

Certain areas within the refuge may be closed to provide undisturbed areas for wildlife. Other areas may be closed to hunting to permit safe, non-consumptive visitor use during the hunting season.

Hunting from permanent tree stands and hunting with the aid of bait would be prohibited. The use of dogs to hunt white-tailed deer would be prohibited. Waterfowl hunting from permanent blinds would be prohibited.

Fishing

Fishing would be permitted within the framework of state regulations and licensing requirements. Boats would be permitted and motor size/use restrictions in certain refuge-controlled areas may be implemented if necessary to protect important habitat and wildlife resources. Air-thrust boats would be prohibited.

Wildlife Observation and Photography

Wildlife observation and photography would be encouraged. To provide opportunities for wildlife observation, facilities that might be developed include wildlife observation platforms and nature trails. The development of these facilities depends upon the availability of funds.

Environmental Education and Interpretation

Environmental education and interpretive programs would be designed to enhance the visitor's understanding of natural resource management and ecological concepts. The refuge could serve as an important "outdoor classroom" for the area's local schools. Teacher workshops may be offered to enhance on-going environmental education programs.

Law Enforcement

Enforcement of state and federal laws on a national wildlife refuge is important to safeguard the refuge's natural and cultural resources as well as to provide safety for the public and to manage visitors. Refuge officers would work closely with other law enforcement agencies and complement their efforts.

FACILITIES MANAGEMENT

Boundaries of any lands acquired would be posted with national wildlife refuge signs at

regular intervals. Signs and barriers may be used to protect sensitive wildlife habitats to reduce disturbance to wildlife or to assure public health and safety.

MISCELLANEOUS

Cultural Resource Management

The Service would inventory the archaeological and historic sites on the proposed refuge lands and assess their eligibility for listing on the National Register of Historic Places. Management would be coordinated with the Louisiana State Historic Preservation Office and other pertinent state and federal agencies.

Fire Management

It would be a refuge policy to use fire when it is the most appropriate management tool for reaching habitat objectives. Wildfires, however, would be aggressively suppressed unless such natural fires are a part of an approved fire management plan. Protection and safety of people and property would be top priority within the fire management program.

The refuge would have a staff trained in fire management and an array of equipment for fire suppression. To supplement these capabilities, cooperative agreements with state agencies and parish or city fire departments are used.

Pest Management

It is Service policy to control those weeds and other plants listed as noxious by the state. This control would be directed at keeping noxious weeds and plants from spreading to adjacent private lands. In addition, other noxious plants and some animals may have to be removed in order to accomplish refuge goals.

APPENDIX C
INTERIM
COMPATIBILITY DETERMINATION

This Interim Compatibility Determination describes the wildlife-dependent recreational activities proposed on lands to be acquired as part of the Red River NWR and determines whether these activities are compatible with the purposes for which the refuge was established. Under the National Wildlife Refuge System Improvement Act of 1997, the National Wildlife Refuge System Administration Act of 1966, and the Refuge Recreation Act of 1962, the Service may not permit public recreational activities on a national wildlife refuge unless the activities are first determined to be compatible with the purposes of the refuge. This Interim Compatibility Determination is intended to bridge the gap between acquisition of refuge lands and completion of a Comprehensive Conservation Plan (CCP).

All lands of the National Wildlife Refuge System will be managed in accordance with an approved CCP that will guide management decisions and set forth strategies for achieving refuge purposes. The CCP will be consistent with sound resource management principles, practices, and legal mandates, including Service compatibility standards and other Service policies, guidelines, and planning documents. One of the major objectives of a CCP is to provide a basis for determining the compatibility of secondary uses on refuge lands. A CCP will be completed as soon as possible after the land is acquired by the Service.

Description of Use: (1) Wildlife observation/photography; (2) recreational fishing of freshwater fish (largemouth bass, crappie, catfish, bream, etc.) in accordance with State of Louisiana regulations; (3) recreational hunting of migratory birds and resident game in accordance with State of Louisiana regulations; and (4) wildlife-oriented environmental education activities such as canoe trips, nature camps, boardwalks, nature trails, etc.

Station Name: Red River National Wildlife Refuge.

Date Established: October 13, 2000

Establishing and Acquisition Authorities: Public Law 106-300, October 13, 2000.

Purposes for which the Refuge was Established: To provide for the restoration and conservation of native plants and animal communities on suitable sites in the Red River basin, including restoration of extirpated species; to provide habitat for migratory birds; and to provide technical assistance to private landowners in the restoration of their lands for the benefit of fish and wildlife.

Refuge Objectives: The management objectives of the proposed Red River NWR are to (1) preserve, perpetuate, and manage the riverine and backwater wetland habitat types along the Red River for the benefit of migratory birds; (2) provide for fish and wildlife oriented public uses such as hunting, fishing, bird watching, and environmental education; and (3) provide technical assistance to private landowners in the restoration of their lands for the benefit of fish and wildlife.

Mission of the National Wildlife Refuge System: To administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans (National Wildlife Refuge System Improvement Act of 1997).

Goals of the National Wildlife Refuge System: (1) To preserve, restore, and enhance in their natural ecosystems (when practicable) all species of animals and plants that are endangered or threatened with becoming endangered; (2) to perpetuate the migratory bird resource; (3) to preserve a natural diversity and abundance of fauna and flora on refuge lands; (4) to provide an understanding and appreciation of fish and wildlife ecology and man's role in his environment; and (5) to provide refuge visitors with high quality, safe, wholesome, and enjoyable recreational experiences oriented toward wildlife to the extent these activities are compatible with the purposes for which the refuge was established.

Other Applicable Laws, Regulations and Policy:

National Wildlife Refuge System Improvement Act of 1997

National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee)

Refuge Recreation Act of 1962 (16 U.S.C. 460k-460k-4)

Title 50 of the Code of Federal Regulations, Subchapters B and C)

The Refuge Manual

The Service Manual

Endangered Species Act of 1973 (16 U.S.C. 1531-1543)

Migratory Bird Conservation Act of 1929 (16 U.S.C. 715-715d)

Migratory Bird Hunting and Conservation Stamp Act (16 U.S.C. 718-718h)

Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-712)

National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347)

Bald Eagle Protection Act of 1940 (16 U.S.C. 668-668d)

Anticipated Biological Impacts of the Use: Wildlife-dependent public use is generally encouraged on national wildlife refuges as long as it is compatible with the purposes for which the refuge was established. Public use opportunities are varied and may include both consumptive and non-consumptive uses.

Because the main purpose for establishing national wildlife refuges is the conservation of wildlife and their habitats, surveys are conducted to collect data regarding wildlife populations and habitat trends. This information forms the basis for habitat management decisions. Wise management of fish and wildlife habitats, fish and wildlife populations, and public use requires current and accurate information about the resources on and adjacent to the refuge. Detailed biological and public use information is not presently available for the proposed Red River NWR.

This interim compatibility determination relies on best estimate of current public use levels determined by this author in consultation with knowledgeable personnel of the LDWF. During the Comprehensive Conservation Planning process, the Service would gather public data, conduct surveys to estimate wildlife populations, and fully assess public use impacts

on the resources.

Following is a general description of the type and estimated level of wildlife-dependent recreational activities that are proposed on the Red River NWR and a discussion of whether these uses would be compatible with the purposes of the refuge:

Wildlife Observation/Photography

Non-consumptive uses such as birdwatching and nature photography are minimal at this time due to a lack of public access. Accurate quantitative estimates of these types of uses are not available. The vast majority of visitors to the area has been associated with hunting or fishing activity.

The area's habitat potential for wetland-dependent wildlife species is outstanding. The region has a long tradition of waterfowl use. Once the proposed refuge unit is established and the public and conservation groups become aware of its excellent wildlife observation opportunities, an increase in non-consumptive wildlife-dependent visits is anticipated.

Wildlife observation/photography activities might result in some disturbance to wildlife, especially if visitors venture (either accidentally or purposely) too close to a bird rookery or a raptor nest. This disturbance, when properly managed, is expected to be minimal and to have an insignificant effect on refuge resources, including the fish and wildlife and their habitats and wetland values. Therefore, the anticipated levels of wildlife observation/photography activities are considered to be compatible with the purposes for which the refuge unit would be established.

Fishing

The proposed refuge includes frontage on the Red River. Fisheries resources in the river are excellent. Big river species such as paddlefish, sturgeon, catfish, carp, buffalo, and gar utilize the main stems of the Red River and the overflow lands. Sloughs and secondary creeks provide seasonal reproductive and nursery habitat when water conditions permit. However, these resources are limited due to drainage activities on the properties and the seasonal nature of these habitats. Freshwater game species such as crappie, bluegill, and bass are found in backwater areas, creeks, and river sloughs as well as the river.

Fishing is a common form of public use on the proposed refuge. Fishing for largemouth bass, bream, crappie, and catfish is excellent and extremely popular with local fishermen. Sportfishing in this region is considered to be a traditional form of wildlife-dependent recreation.

Properly regulated recreational fishing on designated areas should not have any adverse impacts on either the fisheries resource, wildlife resource, or other natural resources of the refuge unit. There may be some limited disturbance to certain species of wildlife; however, this should be short-lived, relatively minor, and is not expected to negatively impact the wetland values of the refuge unit. Problems associated with littering and illegal take of fish (undersized fish, over bag limit) would be controlled through effective law enforcement.

Some sensitive areas of the unit may have limited access and use if disturbance becomes a limiting problem.

Sportfishing is very popular in the area. Allowing the public to fish on the refuge unit would result in a positive public opinion and would help build support for the Service and its natural resource conservation agenda. It would also be allowed and managed to assure wise use of a renewable resource.

The projected level of sportfishing is considered to be compatible with the purposes for which the proposed refuge would be established.

Hunting

When flooded, the depressional areas offer excellent waterfowl hunting. Dove hunting is popular and several sunflower fields are planted annually. Rabbit and quail hunting takes place infrequently due to lack of suitable habitat. With proper management, the proposed Red River NWR would contain a diversity of habitat types and a variety of wildlife species. The bottomland hardwoods, moist soil units, and cleared lands would provide ideal habitat for resident game such as white-tailed deer, rabbits, quail, and squirrels. In addition, migratory species such as waterfowl, dove, woodcock, and snipe would utilize this area on a seasonal basis.

Sport hunting provides recreational opportunities and can be used to assist in the management of certain game species. Carefully managed hunting maintains populations at a level compatible with the environment and permits the use of valuable renewable resources. There may be some limited disturbance to non-target species of wildlife and some trampling of vegetation, however, this should be short-lived, relatively minor, and is not expected to negatively impact the habitat on the refuge. Problems associated with littering and violations of game laws would be controlled through effective law enforcement. Some areas of the refuge may be closed to hunting as a sanctuary.

The projected level of hunting is considered to be compatible with the purposes for which the refuge would be established.

National Environmental Policy Act (NEPA) Compliance: Allowing the projected levels of managed hunting, fishing, and wildlife observation and photography activities evaluated in this Interim Compatibility Determination would have negligible impacts on refuge resources.

Permitting these uses should not be controversial. Therefore, this action is categorically excluded from NEPA (516 DMG Appendix I B(5)). During the Comprehensive Conservation Planning process, the Service would evaluate the long-term consequences of continued public use through the preparation of a NEPA document.

In assessing the potential impacts of proposed refuge uses, all available tools were utilized. A site-specific document entitled "Proposed Establishment of Red River National Wildlife Refuge Preliminary Project Proposal," site-specific personal communications (FWS and LDWF biologists), and general references are considered to be sufficient to make this Interim Compatibility Determination.

Determination: These uses are compatible X . These uses are not compatible ____.

Based on the available information, it has been determined that the expected level of public sportfishing, hunting, and wildlife observation and photography activities that would occur on designated areas within the Red River NWR acquisition boundary is compatible with the purposes for which the refuge unit would be established. There has been substantial historical use of this wetland area for hunting, fishing, and other wildlife-dependent recreational activities. Based on available information, there is no indication of adverse biological impacts associated with these activities. Allowing well managed wildlife observation and photography, fishing, and hunting is consistent with refuge objectives and follows current Service policy.

This Interim Compatibility Determination is based on a very limited amount of public use and biological information. Much more information is needed for a detailed analysis of compatibility. During the Comprehensive Conservation Planning process, which would be completed with appropriate public input, the Service would be able to gather additional public use and biological data necessary for a thorough determination of compatibility. Adjustments to the public use program may be made at that time.

There are a number of situations where refuge closures or restrictions are warranted. Examples of these situations include, but are not limited to, protection of endangered species (flora or fauna), protection of colonial bird rookeries, establishment of sanctuary areas for waterfowl, restriction of hunting to selected days of the week, establishment of quota systems to provide for a high quality hunting experience, conflicts with other refuge management programs, or lack of adequate funds to administer the programs.

Stipulations Necessary to Ensure Compatibility: During this interim period, wildlife observation and photography, hunting, and fishing would be permitted in accordance with State of Louisiana regulations and licensing requirements, with the following exceptions:

- The refuge would be open for public use during daylight hours only.
- Air thrust boats would be prohibited.
- Slat traps and nets would be prohibited unless approved for commercial fishing.
- Hunting from permanent tree stands and blinds would be prohibited.
- Firearms/bows would be prohibited except during hunting seasons.
- Baiting or hunting with the aid of bait would be prohibited.
- No camping would be allowed.

When the refuge's Comprehensive Conservation Plan is completed, additional refuge-specific regulations may be implemented.

Justification: The Service's current policy is to expand and enhance opportunities for high quality hunting and fishing on national wildlife refuges.

Hunting and fishing are considered to be compatible with the purposes of the proposed refuge unit and meet one of the unit's objectives to provide for compatible wildlife-dependent recreation. Allowing hunting and fishing follows current Service policy to expand and enhance opportunities for high quality hunting and fishing on refuges. Allowing fishing also helps to maintain and build support for the Service and other wildlife conservation efforts.

Non-consumptive, wildlife-dependent uses such as wildlife observation and photography are compatible with the refuge unit's purpose and meet one of the unit's objectives to provide for compatible wildlife-dependent recreation. Allowing these uses follows current Service policy to provide for compatible wildlife-dependent recreation. Allowing these non-consumptive recreational opportunities helps to maintain and build public support for the Service and its fish and wildlife conservation efforts.

Signature: Refuge Manager:

(Signature/Date)

Concurrence: Chief, National
Wildlife Refuge System,
Southeast Region:

(Signature/Date)

Mandatory 10- or 15-year Re-evaluation Date:

April, 2012

Review: Regional
Compatibility Coordinator:

(Signature/Date)

Review: Refuge Supervisor:

(Signature/Date)

APPENDIX D
INTERIM
RECREATION ACT FUNDING ANALYSIS

Station Name: Red River National Wildlife Refuge

Date Established: October 13, 2000.

Purpose(s) for which the Refuge was Established: To provide for the restoration and conservation of native plants and animal communities on suitable sites in the Red River basin, including restoration of extirpated species; to provide habitat for migratory birds; and to provide technical assistance to private landowners in the restoration of their lands for the benefit of fish and wildlife.

Recreational Use(s) Evaluated for the proposed Red River NWR:

- (1) Recreational hunting of resident game and migratory birds (waterfowl, woodcock, snipe, mourning doves, gallinules) in accordance with federal and State of Louisiana regulations;
- (2) recreational fishing of freshwater fish species (largemouth bass, bream, catfish, crappie, etc.), in accordance with State of Louisiana regulations; and (3) wildlife observation/photography.

Funding required to administer and manage the recreational use(s).

Minimal funding in the amount of \$1,000,000 would be made available to implement initial protection, hunt implementation, data collection, and non-consumptive uses.

Based on a review of the refuge budget allocated for recreational use management, I certify that funding is adequate to ensure compatibility and to administer and manage the recreational use(s).

Refuge Manager:

(Signature/Date)

Refuge Supervisor:

(Signature/Date)

Regional Chief, National
Wildlife Refuge System,
Southeast Region:

(Signature/Date)